Chapter 20

Environmental Sustainability

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NEPA and its implementing regulations require that an EIS address issues related to the environmental sustainability of the proposed action. Specific concerns that must be considered include the balance between short-term uses of the environment and the maintenance and enhancement of long-term productivity; the extent to which the proposed action would use natural resources, including nonrenewable resources; and the extent to which the proposed action would result in irreversible or irretrievable commitments of resources. The state's CEQA guidelines contain a related requirement to consider significant and irreversible environmental changes that could result from implementing a proposed project. The purpose of this chapter is to discuss the proposed action's environmental sustainability and potential to result in lasting substantial changes in the environment, consistent with these requirements.

Short-Term Uses vs. Long-Term Productivity

The purpose of this analysis is to ensure that lead agencies consider whether a proposed undertaking would prioritize near-term benefits over the long-term maintenance and enhancement of environmental health and productivity.

Some of the O&M and minor construction activities that would occur under the proposed action could result in short-term impacts on various environmental resources, including air quality, ambient noise, traffic flow, and surface water quality. Some activities could also affect wildlife habitat and/or result in take of special-status species. However, the level of impact would be reduced by permit review to meet current regulatory requirements; PG&E's existing environmental commitments, which would continue in force under the proposed action; additional measures implemented through the proposed HCP; and mitigation for potential impacts on paleontological resources identified in Chapter 10 of this EIS/EIR. Consequently, the lead agencies have concluded that impacts would be less than significant for all resources, as discussed in Chapters 3 through 17. Moreover, the long-term goal of the proposed action is to protect, conserve and enhance the HCP-covered species and their habitats. As such, the proposed action is explicitly focused on avoiding, minimizing, and offsetting adverse effects and providing long-term benefit to the environment while allowing PG&E to proceed with a program of O&M activities essential to meeting the needs of some 4 million California utility customers.

Like the proposed action, Alternatives 1, 2, and 3 would all enact an HCP embodying a long-term conservation vision for special-status species and their habitats. Each alternative offers a different approach to providing long-term conservation benefits. Alternative 1 stresses measures to avoid take and habitat loss, while Alternative 2 emphasizes enhanced compensation for habitat loss. Alternative 3 follows the same strategy outlined in the proposed HCP but would cover fewer species, with any additional compensation needs addressed on a case-by-case basis, so the effort to regionalize a conservation approach could be less effective under Alternative 3. Consequently, while none of the alternatives would prioritize short- over long-term needs, Alternatives 1 and 2 would likely result in greater long-term benefits.

Under the No Action Alternative, no programwide HCP would be enacted for PG&E's San Joaquin Valley O&M activities; instead, PG&E would continue to address threatened and endangered species issues by consulting with USFWS and DFG and undertaking conservation planning and permitting on a case-by-case basis. Consequently, although there would be no intent to deprioritize long-term environmental enhancement, in practice it would be much more difficult to implement a consistent, regional conservation strategy, and short-term uses could be emphasized at the expense of long-term environmental health and productivity.

Use of Natural Resources

Like many other types of projects, the O&M and minor construction activities enabled by the proposed action would require an ongoing commitment of a variety of nonrenewable (depletable) natural resources, including the following.

- Fossil fuels needed to produce vehicle fuels and lubricants as well as various plastics and other materials.
- Concrete, aggregate, sand, gravel, and steel for some types of maintenance and minor construction.

In addition, some activities would require timber, which is a slowly renewable resource. Many activities would also require the use of water.

Use of nonrenewable commodities such as petroleum, aggregate, and iron would represent an irreversible/irretrievable commitment of resources. Moderate use of sustainably harvested timber would be recoverable over the long term. The magnitude and duration of increased demand for water would be limited, and water use is expected to be within the capacity of available supply, so the amount of water required for ongoing O&M and minor construction is also considered renewable over time.

In addition to material resources, O&M and minor construction tasks enabled by the proposed action would entail a commitment of energy to refine petroleum for fuels and to produce various chemicals used in maintenance, repair, and construction of electrical and natural gas infrastructure. Energy would also be

required to recover and process resources such as aggregate, sand, and iron/steel; to produce concrete and other materials used for O&M and minor construction; and to harvest and mill timber. Energy use would represent an irreversible and irretrievable commitment of resources.

Because all of the alternatives would enable the same program of O&M activities, resource commitments under all action alternatives and the No Action Alternative would be very similar to those described for the proposed action.

Significant, Irreversible Environmental Changes

Implementing the proposed action could result in the following types of environmental changes.

- A very small loss of agricultural land associated with expansion of existing facilities and construction of new infrastructure.
- Potential for new constraints on recreational use as a result of the need for new facilities and compensation lands.
- A small loss of topsoil due to construction of new facilities.
- Long-term effects related to hazardous materials use.
- A long-term benefit to biological resources, aesthetics, and air and water quality because of a long-term increase in acreage of conservation lands.

Under all of the action alternatives, habitat compensation acreages are expected to consistently exceed the actual acreages impacted. This would be particularly beneficial to biological resources, aesthetics, air quality, and water quality. The benefits would continue as long as compensation lands continue in conservation status. Benefits are thus considered irreversible, because the intent of the proposed action—and the legal requirement under the ESA—is permanent compensation for both temporary and permanent effects of O&M and minor construction activities.

At the same time, acquisition of lands for new facilities and for compensation use has the potential to impose minor constraints on agriculture and recreation. These constraints are also considered effectively irreversible. For example, any agricultural land converted for expansion of existing facilities and construction of new facilities would become permanently unavailable—and possibly also unsuitable—for agriculture; however, note that the coexistence of infrastructure situated in agricultural lands is considered a compatible use as farming or ranching operations are likely to continue unimpeded. Land acquired for compensation use would remain physically suitable for cultivation or grazing use, but would be protected in perpetuity for the benefit of biological resources, and would only be used for agricultural production (primarily grazing, as discussed in Chapter 4, *Agricultural Resources*) to the extent such use was consistent with the goals of habitat mitigation under the proposed HCP. However, as discussed in Chapter 4, the extent of agricultural lands converted to

nonagricultural use would be very small, so the associated environmental change, although irreversible, is nonetheless considered less than significant. Constraints on recreational resources, although irreversible, are also expected to be less than significant, as discussed in Chapter 15 (*Recreation*). Similarly, the potential extent of topsoil loss would be small enough that, while any such loss would be irreversible, it is evaluated as less than significant (see Chapter 7, *Geology and Soils*).

As discussed in Chapters 14 (*Public Health and Environmental Hazards*) and 18 (*Cumulative Effects*), there is some potential for environmental contamination through the use of hazardous substances, including fuels, lubricants, herbicides, adhesives, paints, and paving media. However, in light of PG&E's existing program of hazardous materials training and BMPs, and additional protection afforded by permit review under the federal Clean Water Act, the risk is evaluated as incrementally less than significant. Moreover, in the event of a spill or release, most types of contamination likely to result from O&M or minor construction would represent reversible effects.